

ABSTRACT

SYSTEM AND METHOD FOR TRANSMITTING DATA BY MEANS OF
ACOUSTIC WAVES

There is described a method of transmitting data by means of acoustic waves between a transmitter device (2) and a receiver device (1) wherein the transmitter device has a first electroacoustic transducer (26) for transmitting an acoustic carrier wave at one or more frequencies and means for modulating the acoustic carrier wave as a function of data to be transmitted and the receiver has a second electroacoustic transducer (18) for receiving the acoustic carrier wave modulated by the transmitter device and means for demodulating the acoustic carrier wave and extracting the transmitted data therefrom. The first and second electroacoustic transducers each have a determined bandwidth and a determined frequency response characteristic. The frequency of the acoustic carrier wave is varied during a determined time period to sweep a determined range of frequencies situated in the band common to the first and second electroacoustic transducers so that the frequency of the transmitted acoustic carrier wave does not coincide at any time with a peak or a trough of the frequency response characteristic of the first or the second electroacoustic transducer.

There is also described a data transmission system for implementing the above method.

20 Figure 1